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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/710,955	08/13/2004	Ernest P. Chock	64154-5004	4954
24574 7590 05/31/2007 JEFFER, MANGELS, BUTLER & MARMARO, LLP 1900 AVENUE OF THE STARS, 7TH FLOOR LOS ANGELES, CA 90067			EXAMINER HASAN, MOHAMMED A	
			ART UNIT 2873	PAPER NUMBER
			MAIL DATE 05/31/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/710,955	<b>Applicant(s)</b> CHOCK ET AL.	
	<b>Examiner</b> Mohammed Hasan	<b>Art Unit</b> 2873	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 April 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 23-43 is/are pending in the application.
- 4a) Of the above claim(s) 1-22, 44-54 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 23-33 is/are allowed.
- 6) ☒ Claim(s) 34-40 and 42 is/are rejected.
- 7) ☒ Claim(s) 41 and 43 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 August 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>8/13/2004</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Claims 1-22,44-54 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 4/30/2007.
2. Applicant's election without traverse of 23-43 in the reply filed on 4/30/2007 is acknowledged.

### ***Oath/Declaration***

3. Oath and declaration filed on 8/13/2004 is accepted.

### ***Information Disclosure Statement***

4. The prior art documents submitted by applicant in the Information Disclosure Statement filed on 8/13/2004 have all been considered and made of record (note the attached copy of form PTO – 1449).

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

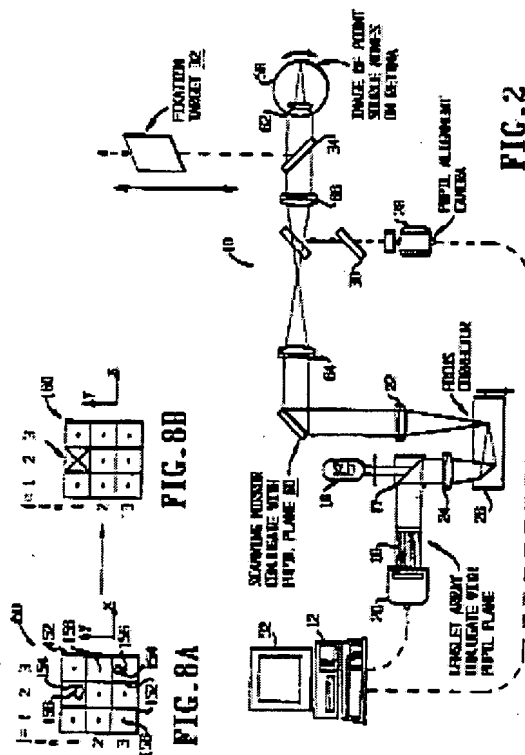
Claims 34-40, and 42 are reject under 35 U.S.C. 103(a) as being unpatentable over Williams et al (6,827,444 B2) in view of Roh (2004/0218241 A1) .

Regarding claim 34, Williams et al discloses ( refer to figures 2,8A ) a computer-readable medium (12) having computer-executable instruction stored thereon for capturing an image of an eye, the eye (58) having a pupil , the computer –executable instructions, when executed by a computer, causes the computer to perform a method comprising the steps of: determining a size and location the pupil , comparing the determined size and location to a predetermined size and position and outputting a final image if the size and location matches the predetermined size and position, respectively ( column 16, lines 5-30, column 14, lines 40-60).

Williams et al discloses all of the claimed limitations except an iris and a size and location of the iris.

However, Roh discloses (refer to figure 1) the iris (206) the size and location (paragraph 0046).

It would have been obvious to one of ordinary skill in the art the time invention was made to provide an iris in to the wavefront sensor for the purpose of reduce the reference beam received from the iris toward an incident location on the lens as taught by Roh (paragraph 0021).



Regarding claim 35, Williams et al discloses wherein the method further comprises the steps of capturing the final image (as shown in figure 2).

Regarding claim 36, Williams et al discloses wherein the image comprises a plurality of pixels and the step of determining a size and location of one of the iris and the pupil comprises the step of determining whether each of the plurality of pixels represents one of an iris pixel and a pupil pixel (as shown figure 8A).

Regarding claim 37, Williams et al discloses (refer to figures 2 and 8A) a computer-readable medium having computer-executable instruction stored thereon for capturing an image of an eye, the eye including a pupil with a size, the computer-executable instruction, when executed by a computer causes the computer to perform a

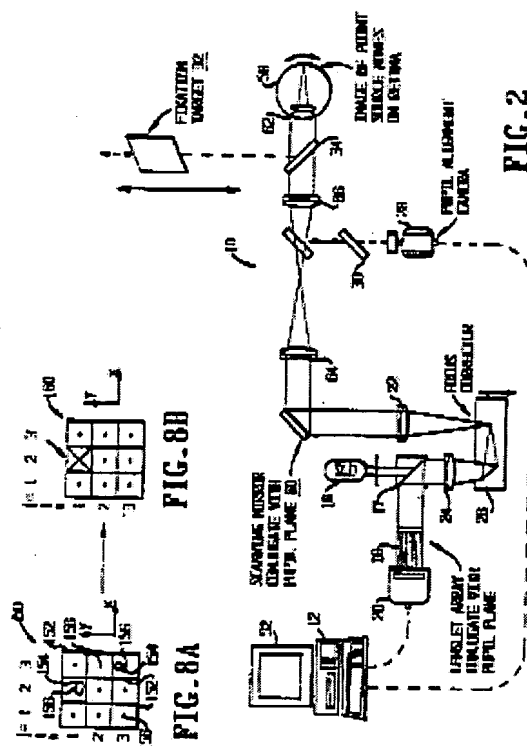
Art Unit: 2873

method comprising the steps of: manipulating the size of the pupil by exposing the pupil  
determining the size of the pupil, and outputting a final image when the size of the pupil  
matches a predetermined size ( column 16, lines 5-30, column 14, lines 40-60).

Williams et al discloses all of the claimed limitations except a light starting at a  
first intensity level and ending at a second intensity level.

However, Williams et al discloses pixels intensity value and a light source  
(column 4, lines 10-17).

It would have been obvious to one of ordinary skill in the art at the time invention  
was made to provide pixel intensity value with a light source in to the wavefront sensor  
for the purpose capable of handling the unique problems of the eye as taught by  
Williams et al (column 3, lines 1-5) .



Regarding claim 38, Williams et al discloses wherein the first intensity level is greater than the second intensity (as shown in figure 8A).

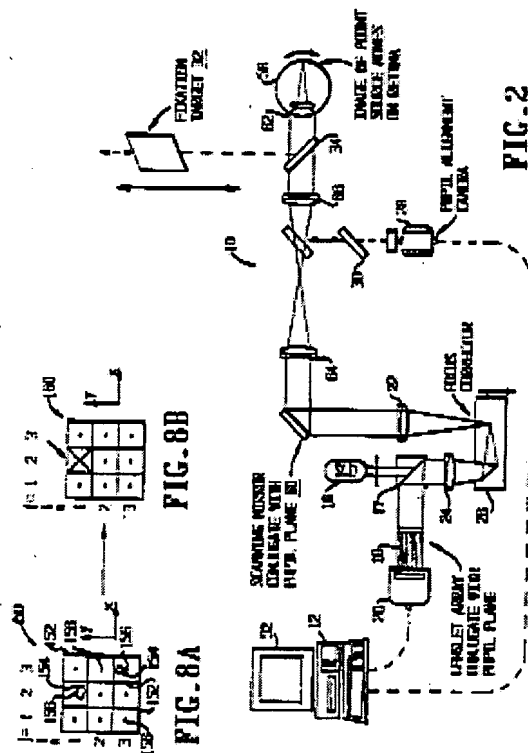
Regarding claim 39, Williams et al discloses wherein the second intensity level is zero (as shown in figure 8A).

Regarding claim 40, Williams et al discloses (refer to figures 2 and 8A) a computer-readable medium (12) having computer-executable instruction stored thereon for capturing an image of an eye, the eye (58) including a pupil with a size, the computer-executable instruction, when executed by a computer causes the computer to perform a method comprising the steps of: capturing a first image of an eye having a pupil, detecting an edge of the pupil, and the pupil along two diagonal paths, each diagonal path by two diagonally opposing corners of the first image (column 16, lines 5-30, column 14, lines 40-60).

Williams et al discloses all of the claimed limitations except image having four corner and a distance from each corner and determining distance from each corner of the image to the edge of the pupil.

However, Williams et al discloses an image and edge of the pupil (column 14, lines 40-45, an image as shown in figure 8A).

It would have been obvious to one of ordinary skill in the art time invention was made to provide an image and pupil in to the wavefront sensor for the purpose capable of handling the unique problems of the eye as taught by Williams et al (column 3, lines 1-5).



Regarding claim 42, Williams et al discloses wherein the method further comprises the steps of adjusting a size of the pupil by varying the intensity of a visible light source (column 14, lines 35-50).

**Allowable Subject Matter**

6. Claims 23-33 are allowed.
7. The following is an examiner's statement of reasons for allowance: The prior art taken either singularly or in a combination fails to anticipate or fairly suggest the limitations of the independent claims, in such a manner that rejection under 35 U.S.C. 102 or 103 would be proper. The prior art fails to teach a combination of all the claimed



Art Unit: 2873

features as presented in independent claim 23 , which include, determining a distance from each measurement origin to the edge of the iris and outputting a final image each of the determined distances is equal to respective one of the plurality of predetermined lengths.

8. Claims 41 and 43 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The following is a statement of reasons for the indication of allowable subject matter: The prior art fails to show, wherein the method further comprises the steps of outputting a final image when the distance from each corner of the image to the edge of the pupil is equal to each other and wherein the method further comprises the steps of determining the size of the pupil by calculating an average darkness level in the pupil and using this average as a defining threshold for determining the area of the pupil.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The closest prior art Williams et al (6,948,818 B2) discloses a method and apparatus for improving vision and the resolution of retinal images.

### ***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammed Hasan whose telephone number is (571) 272-2331. The examiner can normally be reached on M-TH, 7:00 AM to 5:30 PM.

Art Unit: 2873

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky L Mack can be reached on (571) 272- 2333. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MH

  
Mohammed Hasan

May 26, 2007

Examiner, AU - 2873